

Aim: To assess the diagnostic value of temporal artery biopsy (TAB) in patients referred with suspicion of Giant Cell Arteritis (GCA).

Method: A retrospective audit was conducted on patients who underwent TAB over 2 years in a DGH setting. Patient records, blood and histology results were reviewed. Results were compared with American College of Rheumatology (ACR) guidelines.

Result: 72 TAB cases were reviewed. 30 cases were excluded due to no records found of patients' signs and symptoms at the time of presentation. The diagnostic criterion set by ACR was used as a tool. 11.1% had positive TAB. 98.6% were over 50 years of age. 83.3% had new onset headache. 14.3% had temporal artery tenderness. 50% had erythrocyte sedimentation ratio (ESR) above 50.

87.5% of positive TAB had ESR above 50. 30.5% met 3 or more criteria set by ACR, of which 36.4% had positive TAB. 78.6% patients were treated as GCA despite negative TAB.

Sensitivity of TAB was 11.1% and specificity was 43.6%.

Conclusion: Higher number of patients are diagnosed and treated for GCA on clinical grounds despite negative TAB result. Low diagnostic value of TAB questions the use of this test in diagnosing and treating patients with GCA.

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0993: ANATOMICAL VARIATIONS IN THE VISCERAL ARTERIAL BRANCHES IN ANEURYSMAL AND NON ANEURYSMAL ABDOMINAL AORTAS

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Aim: A thorough knowledge of anatomy has always been a basic requirement for a surgeon.

This paper presents the anatomy of a large personal series of AAA repairs requiring supracoeliac (SC), suprarenal (SR) and infrarenal (IR) cross clamping the aim was to compare this data in a series of aged matched non aneurysmal patients.

Method: Computed tomography (CT) scans for all patients under one surgeon's care were reviewed by two consultant radiologists and scans reconstructed using IMPAX imaging systems. Measurements of all visceral branches and aneurysm neck morphology were recorded and compared.

Result: Images of 19 SC aneurysms, 26 SR aneurysms, 45 IR aneurysms and 39 non aneurysmal CT scans were examined. The average diameter of AAA was 61mm for IR, 69mm for SC, 62mm for SR. While individually there was no statistical difference in distances from visceral branches, when SC and SR groups were combined and compared to non aneurysmal morphology $p=0.04$.

Conclusion: This is the first study to detail pre-operative CT anatomy for aneurysms requiring complex open procedures. The data includes specific measurements for the site of visceral and renal arteries in the relationship to the aneurysm neck

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1082: ASSESSMENT OF CAROTID PLAQUE MORPHOLOGY IN SYMPTOMATIC CAROTID ARTERY DISEASE ON ULTRASOUND FOR PREDICTING THE INCREASED ISCHAEMIC STROKE RISK – A SYSTEMATIC REVIEW

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Objective: Current recognised criteria for symptomatic carotid artery intervention focuses on the degree of internal carotid artery (ICA) stenosis. However, such symptomatic patients may have co-existing abnormal plaque morphology. We conducted a systematic review to evaluate the importance of ultrasonic plaque morphology as an independent marker for intervention.

Method: A total of 3253 abstracts were screened from Pubmed and Medline databases. We included all studies evaluating carotid plaque echogenicity and stenosis in symptomatic carotid artery disease.

Result: 4297 patients with 4518 carotid arteries were analysed from thirteen studies. Plaque evaluation was based on visual interpretation using multiple different classification systems was subject to significant inter- and intra-observer variability. Due to these variations in plaque assessment methodology, secondary parameters could not be systemically analysed. There was no clear evidence to suggest that ICA stenosis has any relation to echogenicity of plaque. These studies indicated the importance of plaque echolucency as an important factor which should be considered during interventional decision making.

Conclusion: Carotid plaque morphology is suggested to play an important role in the pathogenesis of symptomatic disease. However, further study is warranted to provide standardisation of sonographic plaque assessment.

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1161: EVALUATING THE POTENTIAL FOR A NEW SPECIALIST CENTRAL VASCULAR ACCESS SERVICE – ARE WE USING TOO MANY HICKMAN LINES?

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Aim: Previous evaluation of our central venous access service suggested over-reliance on Hickman Lines (HLs) compared to Peripherally-Inserted Central Catheters (PICCs). We reviewed HL & PICC insertions to evaluate potential quality improvement targets for development of a new vascular access service.

Method: Electronic theatre records were retrospectively examined for number of HLs & PICCs inserted. Referrals for HLs & PICCs were analysed to determine optimal line type based on indication, with additional analysis of expired peripheral cannulas prior to PICC placement to estimate potential reductions in cannula use with early PICC placement.

Result: Theatre records demonstrated 78 HL and 61 PICC insertions in 2015. Of 46 available HL referrals, 15 should have been for a PICC, based on indication. Lack of overlap between referral and insertion records indicates incompleteness of both. From September – December 2015, 179 peripheral cannulas were inserted in 37 patients who later had a PICC.

Conclusion: Our study suggests PICCs are underused in patients referred for central vascular access; further benefit may be gleaned from early PICC placement. We are developing an electronic referral system for integration with the existing Electronic Patient Record to streamline referral and facilitate placement of correct line type.

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1279: A SHOCKING TREATMENT FOR INTERMITTENT CLAUDICATION

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Background: Intermittent claudication (IC) presents as one of the earliest and most common symptoms of peripheral arterial disease (PAD) and has detrimental effects on patients walking ability in terms of maximum walking distance (MWD) and pain free walking distance (PFWD). Research has suggested extracorporeal shockwave therapy (ESWT) may induce angiogenesis in treated tissue.

Aim: To assess the safety, tolerability and efficacy of ESWT in the treatment of intermittent claudication.

Method: Thirty-one patients with unilateral claudication were randomised to receive either ESWT or sham treatment to the calf muscle bulk three times per week for three weeks. Subject tolerability, ankle brachial index (ABI), MWD, PFWD and safety were all formally assessed as outcome measures.

Result: ESWT was well tolerated by all those within the active treatment group with no safety issues or complications reported. At 4 weeks there was a statistically significant improvement ($P>0.05$) in both PFWD and MWD in those assigned to active ESWT when compared to the sham treatment group.

Conclusion: ESWT is safe and well tolerated and demonstrated a dramatic improvement in walking distances comparable to other forms of existing